

HEALTH INFORMATION TECHNOLOGY BLUE RIBBON TASK FORCE
DRAFT MEETING MINUTES

April 09, 2010
9:00 am

Legislative Building
401 South Carson Street, Room 2134
Carson City, NV 89701-4747

Grant Sawyer State Office Building
555 East Washington Avenue, Room 4401
Las Vegas, NV 89101-1072

TASK FORCE MEMBERS PRESENT:

Carson City:

Peggy Brown
Robert “Rob” Dornberger
Charles “Chuck” Duarte
Rick Hsu
Scott Kipper
Stephen Loos, MD

Las Vegas:

Dr. Raymond Rawson, Chairman
Marc Bennett, Vice Chairman
Bobbette Bond
Chris Bosse
Tom Chase
Valerie Rosalin, RN
Robert “Bob” Schaich
Dr. Maurizio Trevisan
Glenn Trowbridge

TASK FORCE MEMBERS EXCUSED:

Tracey Green, MD
Marena Works, RN
Brian Brannman
JoAnne Ruh

DEPARTMENT OF HEALTH AND HUMAN SERVICES (DHHS) STAFF PRESENT:

Mike Willden, Director, Department of Health and Human Services (DHHS)
Lynn O’Mara, Health Information Technology Project Manager, Director’s Office, DHHS
Cynthia Pyzel, Assistant Chief, Bureau of Public Affairs, Office of the Attorney General
Gabriel Lithier, Senior Deputy Attorney General, Office of the Attorney General
Mel Rosenberg, Chief of IT, Nevada Division of Health Care Financing and Policy
Ernesto “Ernie” Hernandez, IT Manager III, Office of Informatics and Technology, Health Division
Theresa Presley, IT Professional II, Office of Informatics and Technology, Health Division
Joyce Miller, Administrative Assistant, Director’s Office, DHHS

OTHERS PRESENT:

Dustin Boothe, Senior Disease Investigator, Carson City Health and Human Services
Kevin Hayes, Vice-President, Arizona Nevada Tower Corporation (ANTC)
Deborah Huber, HealthInsight, Las Vegas
Keith Parker, HealthInsight, Las Vegas
Marc Amorelli, Hometown Health
Gabriel Bonnet, MD
Alex Kasper
Alex Tunchek
Cy Ryan, Las Vegas Sun
Burlin H. Ackles MD

Dr. Raymond Rawson, Chairman, called the meeting to order at 9:00 a.m. He stated that today's meeting agenda was posted in accordance with Nevada Open Meeting Law at the Nevada Department of Health and Human Services, the Grant Sawyer State Office Building, the Legislative Building, the Nevada State Library and Archives, and on the Nevada Department of Health and Human Services web site. He also explained that the meeting was being videoconferenced from the Grant Sawyer Building in Las Vegas to the Legislative Building in Carson City, as well as being broadcast live over the Internet.

Dr. Rawson stated that public comment would be taken later during the meeting. He reminded everyone that when speaking to state their name and who they represented, for the record. Also, he commented that as the Chairman, he reserved the right to limit comments to three (3) minutes per person, and would respectfully interrupt if the time was exceeded. He asked that information already presented by someone else not be repeated. In addition, he further explained that our committee follows the Robert's Rule of Order.

Dr. Rawson reminded everyone in Carson City and Las Vegas to please sign the attendance sheet for their location.

He announced that earlier in the week, Governor Gibbons appointed JoAnne Ruh to the Task Force. Unfortunately, she could not attend today's meeting. He explained that Ms. Ruh is the Chief Information Officer for the Nevada Cancer Institute and has over 20 years experience in all aspects of IT, including substantial experience with Health IT. She was a founder and board member of a regional Health Information Organization in western New York. She also has a BA in Economics and an MBA with a concentration in Health Care Administration.

Dr. Rawson asked Ms. O'Mara to make additional introductions.

Ms. O'Mara announced that Todd Radtke was no longer with the Broadband Task Force due to his job demands for the Nevada Rural Hospital Partners. The Governor appointed Vice Chair Daphne DeLeon as he new Chair. While she could not attend today's meeting, she hoped to participate at future ones. Todd is still available to this Task Force as a subject matter expert. Ms. O'Mara informed the Task Force that Senior Deputy Attorney General, Gabriel Lither, would provide counsel to the Task Force, along with Cindy Pyzel, to ensure coverage for all meetings. Mr. Lither represents Nevada Medicaid and provides counsel to the Health Division Primary Care Advisory Council.

Dr. Rawson directed Joyce Miller to call the roll.

1. Roll Call and Approval of Meeting Minutes from the February 12, 2010 meeting

Joyce Miller called the roll. She informed the Chairman that Brian Brannman was excused; Dr. Tracey Green was excused and represented by Ernie Hernandez; JoAnne Ruh was excused; and Marena Works was excused and represented by Dustin Boothe.

Ms. Miller informed Dr. Rawson that a quorum was present.

Dr. Rawson explained that those individuals representing Task Force Member had voting rights. He encouraged their participation in Task Force discussions, as part of the team.

Dr. Rawson asked the Task Force members if there were any additions, corrections or comments to the minutes of the February 12, 2010 meeting. There being none, he asked for a motion to approve the minutes.

MOTION: Bob Schaich moved to approve the minutes from the February 12, 2010 meeting.

SECOND: Valerie Rosalin

APPROVED: UNANIMOUSLY

2. Informational Item: ARRA Broadband Initiatives Program (BIP) Application to the Rural Utility Service (RUS of the U.S. Department of Agriculture (USDA))

Dr. Rawson stated that during the February meeting, during public commit, ANTC reported it would be submitting an application for broadband funding. The Task Force agreed to allow them time to present an overview of their application. Dr. Rawson stated that the application was a companion to the Nevada Hospital Association application, which was also outlined during the February meeting. He commented that some of the Task Force Subcommittees may want to work with Mr. Willden and the Nevada Hospital Association, regarding broadband issues for HIE.

Kevin Hayes, ANTC Vice President, provided information to the Task Force contained in the handout entitled "ANTC Nevada Community Anchor Wireless Backhaul Solution" regarding his company's ARRA broadband grant application to the USDA.

Mr. Hayes stated that ANTC had been developing broadband communication infrastructure for rural and tribal communities in Nevada since 2003. The company also provided cost effective alternatives to fiber optics. He explained that ANTC had submitted its BIP application for the second round middle mile funding. The company was proposing a system designed specifically to provide high-speed assistance to anchor institutions in each of the communities they pass through. He explained that this service was not limited to these community anchor institutions, and would be available as a wholesale service, even to commercial users. This alternative to fiber optics would provide significant access to broadband for community anchor institutions, enterprise users and commercial users. The related network of tower structures could be utilized for public safety and mobile wireless communications.

Mr. Trowbridge inquired about coverage for communities such as Laughlin and Searchlight. Mr. Hayes replied that the necessary infrastructure was in place, and the capability could be accessed via Christmas Tree Pass.

Mr. Schaich asked if there were any competing carriers looking to provide broadband services in the same referenced corridors. Mr. Hayes replied that incumbent fiber optics already existed in some of the corridors, although not all. However, AT&T provided was an incumbent provider.

3. Staff Report: State Health Information Exchange Cooperative Agreement

Ms. O'Mara stated that DHHS did receive the agreement funding notice on February 12, 2010, although the funding was restricted until certain requested information was provided to and approved by ONC. DHHS submitted the information by the due date, and hoped that the funding would be released soon. She reported that ONC and CMS had approved five types of shared HIE activities that could be done by Medicaid and the HIE grant. The federal agencies acknowledged that for many states being able to pool resources enabled the activities to be done more efficiently and effectively. One such activity was the environmental scan, and it would be done as a joint effort of the HIE grant and Medicaid's HIE funding.

Ms. O'Mara commented that there were some unanticipated new requirements stipulated by the cooperative agreement, and all of the requirements were essentially the To Do List for her and the Task Force. She reported that there were fewer dollars allocated for the planning phase as HITECH restricted that allocation to no more than 10 per cent of the total award. For Nevada, it meant that \$613,343 could be used for getting the Strategic Plan and Operational Plan developed, and both were due to ONC by August 31, 2010.

Ms. O'Mara reported that she and all the state HIT coordinators would be attending the mandatory HIE Cooperative Agreement kick-off meeting being held in the Washington, DC area in mid-May. She also reported that *HealthInsight* had provided additional information regarding Nevada's REC, and stated it would be posted on the DHHS HIT Web site as soon as possible. Ms. O'Mara explained that one of the new grant requirements was a formal legal inventory for developing an HIE policy framework, and funding was now allocated to accomplish this task. The agreement funding allocated for implementation was now divided between intra-state HIE and Interstate and nationwide HIE. She also reported that she and Mr. Duarte would be attending the National Governors Association State Alliance for e-Health regional meeting later this

month. The purpose was to discuss HIT and HIE Cooperative Agreement issues being experienced by the states and territories, and ONC and CMS would have representatives present

Mr. Duarte commented that there were components of the environmental scan that were specific to Medicaid that would be used to develop the EHR incentive program. These included the actual number of eligible providers and the size of their Medicaid population. The scan results would be available 90 days after the project was initiated.

Ms. O'Mara commented that the College of Southern Nevada announced they has received funding s part of the HITECH Workforce Development Training Awards, and asked Dr. Trevisan to provide more detailed information.

Dr. Trevisan explained that Los Rios College in California was now providing short-term certification courses that could be completed in less than 6 months. The Workforce Development funding of approximately \$5 million was awarded to an ONC-specified region composed of California, Arizona, Hawaii and Nevada, and the College of Southern Nevada was the Nevada participant.

Ms. O'Mara announced that during the May 7, 2010 meeting of the Task Force, there would be a panel of presenters focusing on HIT workforce readiness issues. Dr. Trevisan and Caroline Ford, from the University of Nevada School of Medicine, would focus on Nevada-specific concerns. Dr. William Hersh, a recognized national expert on HIE and workforce readiness issues, would part of the panel.

Ms. O'Mara reported that technical errors had been noted in the Task Force Bylaws. For the next meeting, a corrected draft would be provided to the Task Force members for review, and it would be an action item on the agenda.

Ms. Bond inquired about the timeline for getting the environmental scan completed. Ms. O'Mara replied that providing the Board of Examiners approved the requested vendor contract amendment on April 13, 2010 and HIE grant funding authority was granted by the Interim Finance Committee on April 29, 2010, the scan performance period was expected to be May 1 to July 31, 2010.

4. Appointments: HIE Planning Subcommittees

Dr. Rawson stated that since there was such a tremendous amount of work to be done, he and Mr. Bennett agreed that appointing task-specific Subcommittees was the best approach. He directed Ms. O'Mara to be sure that he and Mr. Bennett were notified of all Subcommittee meetings, commenting that they would do their best to attend and support them, as often as possible.

Ms. O'Mara reviewed the information provided to the Task Force members regarding the framework for Subcommittee meetings. All Subcommittee meetings would be held via conference calls, in accordance with Nevada Open Meeting Law. She reminded everyone that the Task Force Bylaws applied to the Subcommittees. Ms. O'Mara reported that transparency and broad stakeholder participation were mandated by the HIE Cooperative Agreement. Task Force and Subcommittee members will receive all Subcommittee meeting agendas, and the Subcommittees were encouraged to coordinate and collaborate on their efforts.

As a side note, Ms. O'Mara reported that ONC approved the funding of four positions under the agreement: her position as HIT Project Manager, Ms. Miller's position as Administrative Assistant, a Health Program Manager position, and an Accounting Assistant Position.

Mr. Lither responded to questions regarding subcommittee members working together outside of formal meetings, and reviewed what was and what was not acceptable under Open Meeting Law. Dr. Rawson commented that the Task Force was dedicated to an open process, and nothing would be secret from the public.

Ms. O'Mara explained that the Subcommittees members could call can on whatever subject matter experts, stakeholders, coalitions, other Taskforce members, other subcommittees, etc. they felt necessary to assist with

their deliberations. She also commented that public workshops were an option, to obtain necessary feedback from affected stakeholders.

Ms. Bond suggested an April 23rd start date for Subcommittee meetings, and allowing 2 hours. Ms. O'Mara stated that Open meeting Law requirements could be met, for meetings on April 23, 2010.

For the record, Dr. Rawson asked Ms. O'Mara to specify each Subcommittee name, membership and objectives.

Subcommittee on HIE Technical Infrastructure - Stephen Loos, MD – Chair

Brian Brannman	Ernie Hernandez
Robert Schaich	Todd Radtke
Alicia Hansen	Mel Rosenberg

Objectives: Recommend a statewide HIE technical infrastructure that leverages existing efforts, resources and assets; facilitates shared directories and technical services; ensures intra-state, interstate and nationwide HIE, including the NHIN; enables telemedicine integration into EHRs; is integrated, scalable and technically sustainable; meets interoperability standards and requirements and supports HIE services.

Mr. Hsu inquired if all members of a Subcommittee had voting rights. Ms. O'Mara confirmed that they did.

Subcommittee on HIE Governance and Accountability - Bobbette Bond – Chair

Chuck Duarte	Deborah Huber
Rick Hsu	Dr. Gregory Mosier
Scott Kipper	Bill Welch
JoAnne Ruh	

Objectives: Recommended a statewide HIE governance structure that enables statewide HIE for health care stakeholder groups, including providers, payers and pertinent government agencies via a State Designated Entity (SDE); facilitates coverage of all providers for meeting HIE and meaningful use requirements; ensures the coordination, integration and alignment of efforts with Medicaid, public health (e.g., immunization registry, communicable disease reporting, epidemiological surveillance, etc.), federal health delivery systems (e.g., IHS, VA, DoD, etc.), and state health insurance exchanges; protects personal health information in a secure manner; establishes mechanisms to provide oversight and accountability of HIE to protect the public interest and ensures HIE among providers are compliance with applicable policies and laws; creates new private sector business and job opportunities and enables health economics analysis and evaluation.

Subcommittee on HIE Financial Viability and Sustainability - Chris Bosse – Chair

Robert Dornberger	Steve Boline
Tom Chase	Jack Kim
Leslie Johnstone	Dr. Jeanne Wendel

Objectives: Identify feasible public and/or private financing mechanisms for funding the required federal matches for HIE grants, the HIE SDE, and EHR adoption and make recommendations on which mechanism(s) would be the best path to a sustainable HIE.

Subcommittee on EHR Adoption and Meaningful Use - Marc Bennett – Chair

Dr. Tracey Green	Justin Luna
Dr. Maurizio Trevisan	Larry Matheis
Caroline Ford	Keith Parker

Objectives: Identify barriers to EHR adoption and potential strategies to remove the barriers; recommend standards for HIE data transmission and aggregation that support clinical care standards and meaningful use; identify workforce readiness requirements and recommend strategies and/or programs to meet workforce needs.

Subcommittee on HIE Privacy, Security and Patient Consent - Glenn Trowbridge – Chair

Peggy Brown	Rebecca Gasca
Valerie Rosalin	Ernie McKinley
Marena Works	Theresa Presley

Objective: Recommend a statewide HIE policy framework that protects the privacy and security of personal health information.

Mr. Trowbridge stated that he would like the record to show that he suggested the initial Subcommittee on Privacy meeting convene on April 23rd.

Ms. O'Mara stated that a Subcommittee Contact List would be distributed to all of the Subcommittee members by the following week.

Pursuant to Section V, Subsection B of the Task Force Bylaws, Dr. Rawson appointed all referenced Subcommittees and Subcommittee members.

Mr. Bennett asked Ms. O'Mara if spoken with Ms. Ruh regarding her technical expertise and experience, i.e., her involvement with the New York effort. He suggested that she be placed on the HIE Technical Infrastructure Subcommittee, instead of the HIE Governance and Accountability Subcommittee.

Ms. O'Mara responded that she had spoken with Ms. Ruh, who had commented she had an interest in the HIE Governance and Accountability Subcommittee, and also, stated she was willing to work with the other Subcommittees and assist where needed.

Dr. Rawson requested that Ms. O'Mara ask Ms. Ruh if she was willing to serve on both Subcommittees, and report back during the next Task Force meeting.

5. Review and Discussion: Draft HIT Blue Ribbon Task Force Report to the Governor

Dr. Rawson reminded the Task Force that their first report to the Governor was due at the end of April. Referring to the draft report provided to the Task Force members, he explained that all feedback from the discussion during this meeting would be incorporated into a second draft. Ms. O'Mara stated that the second draft would be sent to the Task Force on or before April 15, 2010, and comments would need to be received no later than April 21, 2010. The final draft would be sent to Dr. Rawson, Mr. Willden and Mr. Bennett for final review and approval, and then submitted to the Governor's Office on or before April 30, 2010.

Ms. O'Mara noted that the report's preliminary recommendations would include four proposed Bill Draft Requests (BDRs). She explained that final Executive Branch BDRs were due to the Legislative Counsel Bureau (LCB) by September 1, 2010. This would allow some time to discern what might actually be needed, as the Task Force reviewed the results of the work done by the Subcommittees, the environmental scan and the legal inventory.

Mr. Bennett asked for clarification on any state general fund requirements needed by DHHS, and if there was time before state budgets were due. Ms. O'Mara reported that budgets could be revised through August, and that the draft report to the Governor stated the Task Force would provide updated information and/or recommendations to the Governor's Office by August 23, 2010.

Mr. Willden reviewed the process and timeline for submitting BDRs for the 2011 Legislative Session. He explained that the Budget Office needed proposed legislation submitted to them by May 3, 2010. This means he needed a good idea of the type of legislation the Task Force was recommending. The BDRs were due to the Legislative Counsel Bureau by September 1, 2010, when bill drafting will start. It is done on a first come, first served basis. The sooner BDRs can be submitted, the higher up on the priority list they will be.

Dr. Rawson encouraged the Task Force members to get issues defined as soon as possible.

Mr. Schaich expressed concern about the requirements in the HIE Cooperative Agreement regarding the inventory of the legal framework for facilitating HIE. Specifically, he requested more information about the logistics of the inventory, since there was no Subcommittee addressing it. Ms. O'Mara responded that the work would be contracted out, as the results would be needed by all of the Subcommittees, and it would be done concurrently with the environmental scan.

Ms. O'Mara reviewed the various sections of the draft report to the Governor. The Task Force then discussed the draft report. Dr. Rawson commented on the current status of Nevada's economy and probable impact on any funding recommendations the Task Force might make.

Mr. Bennett remarked that he wanted to encourage the Task Force not to shy away from making recommendations about what would be necessary to enable and support HIE in Nevada.

Dr. Rawson stated that he was not discouraged about moving ahead with this program, even though there were many pressing issues in the state. He also reminded the committee about the privacy issues, as it was most important to protect patient's individual health information and utilize medication reconciliation management techniques to monitor medication consumption and related issues; complications from medication interactions was a serious issue, and HIT could be a useful tool for proactively working to resolve this problem.

Mr. Schaich recommended that the report include the need for funding to address broadband access in the rural areas of the state. Dr. Rawson agreed. Ms. O'Mara noted that the Broadband Task Force was not provided with the same opportunity as this Task Force to make those kinds of recommendations. Therefore, she would add a section to address these concerns particularly as they related to HIE efforts.

Mr. Hsu asked that given the April 30 deadline for the report, would it be possible to provide the type of policy information mentioned, as part of this preliminary report. Mr. Willden responded that he would suggest between now and the April 30th deadline, if specific legislation could be referenced for the BDRs, e.g., an Arizona or Utah framework, it would help the bill drafters. He stated that it would also help him to better direct staff in preparing supporting budget decision units for consideration.

Mr. Hsu asked if it would be useful to attach the various models for consideration by LCB for bill drafting purposes and for the Budget Office, to help identify funding areas, e.g., broadband access. Mr. Willden replied that it would.

Mr. Duarte commented that Nevada Medicaid had submitted a Technology Improvement Request (TIR) for a take-over or a long-term replacement plan for the Medicaid Management Information system, or MMIS. The related vendor RFP included a requirement for HIE capability, and he requested that these kinds of activities be included in the report. Dr. Rawson directed Ms. O'Mara to add the requested information.

Dr. Rawson stated appreciation for all the comments received, and commented he was anxious for the subcommittees to begin their work and move forward as quickly as they could.

Mr. Bennett asked a question Mr. Duarte and Mr. O'Mara to comment the opportunity for connecting the Medicaid HIE with a statewide infrastructure, given the potential complexity of the related Medicaid regulations and rules.

Mr. Duarte responded that the opportunity was there. He explained that a cost allocation procedure in place that could facilitate the expansion of the Medicaid HIE, making it usable by others.

Ms. O'Mara stated that there were also ARRA broadband applications which might also offer similar or complementary opportunities, and the Medicaid could be the foundation of a statewide HIE. It was something that the HIE Governance Subcommittee would need to consider. She also mentioned the UNR College of Business was a resource in assisting with reviewing and evaluating the options available for establishing a statewide HIE.

Dr. Rawson cited public safety's radio network problems throughout the state, which resulted from the use of different frequencies and systems. This made it very costly and difficult to get everyone to be able to communicate with each other. He cautioned that a comprehensive approach was warranted, to ensure inadequacies were not built into whatever system was selected.

Ms. Bond stated the need for all five Subcommittees to coordinate their efforts, particularly as each had a financial impact. She suggested that each Subcommittee provide that information to the Financial Subcommittee and to the DHHS staff, for the Governor's report and for the work yet to be done. Dr. Rawson agreed. Ms. O'Mara noted that she would be participating at all Subcommittee meetings, and could facilitate the exchange of information and ideas. Ms. Bond replied she concerned that the financial issues that come out of the different subcommittees and wanted to be certain that all financial issues are communicated. Again, Dr. Rawson agreed, and directed DHHS staff to help the Subcommittees relay important information to each other. Ms. O'Mara commented that if there were anything which needed to be address by DHHS, she would notify Mr. Willden.

6. Public Comment and Discussion

Dr. Rawson asked for any public comment. There was none. He noted that the next meeting was scheduled for May 7, 2010.

7. Adjournment

Dr. Rawson adjourned the meeting at 10:36 a.m.

**BYLAWS OF NEVADA HEALTH INFORMATION TECHNOLOGY
BLUE RIBBON TASK FORCE**

Section I – Name

The name of this group shall be the Nevada Health Information Technology Blue Ribbon Task Force and shall be referred to hereinafter as “the Task Force.”

Section II – Authority

The twenty-member Task Force is established by Executive Orders of the Governor on September 11, 2009 and October 20, 2010. It is comprised of experts and stakeholders appointed by the Governor and who represent health care, information technology, government, insurance, business and other related industries. The members serve at the pleasure of the Governor, and the Task Force sunsets on June 30, 2011 unless extended by Executive Order. The recommendations of the Task Force shall be reported to the Governor through the Director of the Department of Health and Human Services, referred to hereinafter as “the Director” and “DHHS” respectively, in accordance with the Executive Order and as often as it deems necessary. The Director shall provide appropriate staff support as required to facilitate the activities and functions of the Task Force.

Section III – Mission

The mission of the Task Force shall include, although not be limited to, the following:

- A) Provide state leadership and coordination of health information exchange and related efforts;

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- B) Promote education and engagement among stakeholders in building a knowledge base of “lessons learned” to facilitate the successful implementation of health information exchange;
- C) Encourage public and private partnerships for the development of a sustainable statewide health information exchange infrastructure;
- D) Facilitate a statewide dialogue on privacy and security of patient health information exchange in an interconnected health care delivery system;
- E) Encourage health information exchange initiatives at the local, county, regional and state level;
- F) Develop performance metrics to measure the success of the implementation of health information technology throughout Nevada;
- G) Identify opportunities and strategies for a public/private partnership approach to create financially viable and sustainable business models for health information technology;
- H) Develop recommendations for a proposed governance structure for a Health Information Exchange that is representative of the needs and interests of the stakeholders;
- I) Review and recommend a model for financing a sustainable health information exchange;
- J) Recommend an information technology architecture that facilitates the deployment and use of health information technology and a health information exchange;

- K) Identify and recommend data sources and standards to facilitate health information exchange, as well as security and privacy of personal health information; and
- L) Review and recommend revisions to state laws and regulations that may impede the exchange of health care information, while protecting sensitive personal health information.

Section IV – Members

Subsection A. Composition. The Governor shall appoint the members of the Task Force.

The Task Force shall consist of no more than twenty members, with a quorum consisting of ~~nine members~~ a simple majority of the members.

Subsection B. Alternate Member. If a member is unable to attend a meeting, he/she may designate a representative to serve in his/her stead who shall have all the rights and privileges of the member while acting on his/her behalf.

Subsection D. Term of Membership. Each Member shall serve at the pleasure of the Governor or until the Task Force sunsets.

Subsection E. Compensation. Members of the Task Force do not receive a stipend. If DHHS has monies available to reimburse all or part of travel expenses for meetings, it will do so at rates that do not exceed the State rates.

Subsection F. Staffing. The Director will provide staff as necessary for purposes of arranging and facilitating the meetings, preparing agendas, taking the meeting minutes, and research needs within the availability of DHHS resources.

Subsection G. Voting. Each member of the Task Force or their designated representative shall be entitled to one vote on any business requiring action by the Task Force.

Subsection H. Termination. Members who are absent from two consecutive meetings, and who do not notify a Chairperson in advance of their expected absence or send an alternate, may be terminated from Task Force membership by the Governor, at the request of the Task Force Chairperson.

Section V – Officers and Conflicts of Interest

Subsection A. Composition. There shall be the following officers of the Task Force: one Chairperson appointed by the Governor and one Vice Chairperson who shall be selected by the members of the Task Force.

Subsection B. Duties of Officers. The Chairperson shall preside at meetings and report the activities and recommendations to the Governor as per the Executive Order. The Chairperson may appoint subcommittees and assign tasks to the members or subject matter experts, as necessary, to fulfill the purposes of the Task Force. The Vice Chairperson shall carry out the duties of the Chairperson in his or her absence. The Chairperson may appoint another member to act in his or her absence, if the Vice Chairperson is unavailable.

Subsection C. Term of Office. A Chairperson and Vice Chairperson serve at the pleasure of the Governor.

Subsection C. Conflicts of Interest. The Governor and Director may consider any possible conflicts of interest when considering recommendations from the Task Force. Members are to declare any known conflict of interest in the manners prescribed by the Chairperson and the Director.

DHHS will survey the Task Force members annually to collect information regarding their affiliations outside of DHHS. If a member's personal or employment circumstances change before 12 months have elapsed, it is the member's responsibility to update the Disclosure Statement and submit it to the DHHS.

Conflicts of interest must be declared by members prior to discussion of any matter that would provide direct financial benefit for that member, or otherwise have the appearance of a conflict of interest. When funding or other decisions are made regarding an organization with which the member has an affiliation, the member shall state his intention to abstain from making specific motions or casting a vote, before participating in related discussion. The Chairperson, or a majority of the Task Force, may also declare a conflict of interest exists for a member, and ask that the member be removed from the voting process.

Section VI – Meetings

Subsection A. Regular. The Council shall meet a minimum of six times during the state fiscal year. The meetings shall be held at a time, date, and place as

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arranged by DHHS. The Task Force shall meet as necessary, if time critical issues warrant such a meeting. A deputy attorney general, from the Office of the Attorney General, will be present during all meetings and serve as legal counsel to the Task Force. Members shall submit proposed agenda topics to DHHS at least ten days before a scheduled meeting.

Subsection B. Open Meeting Requirements. Meetings shall be conducted in accordance with NRS 241, known as “Nevada’s Open Meeting Law.”

Subsection C. Subcommittees. Standing or special subcommittees may be appointed by the Chairperson. Subcommittees must also comply with the open meeting law.

Subsection D. Parliamentary Procedure. The Robert’s Rules of Order shall govern the functions of the Task Force.

Section VII – Amendment of the Bylaws

The bylaws may be amended as approved by a simple majority vote of the full Task Force.

Health Information Technology Blue Ribbon Task Force
Agenda Item 4: Informational Item Overview

The Nevada State Health Division (NSHD) Office of Epidemiology will be applying for the following funding opportunity from the Centers for Disease Control and Prevention:

Epidemiology and Laboratory Capacity for Infectious Diseases (ELC) Cooperative Agreement

Funding Opportunity Number: CDC-RFA-CI10-1007ARRA10

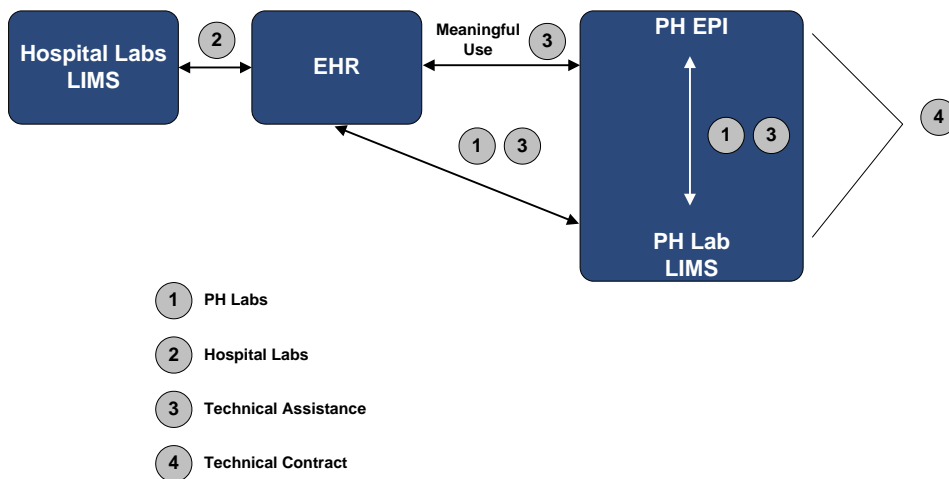
Catalog of Federal Domestic Assistance Number: 93.729

Nevada Opportunity Number: CI07-701

Application Due Date: The grant was originally due on April 7, 2010, but the date for submission has been extended. The new due date is currently unknown. There will be up to 25 awards.

2 –Year Award Amount: Ceiling: \$600,000; Average: \$300,000; Floor: \$100,000

Purpose: The purpose of the Epidemiology and Laboratory Capacity for Infectious Diseases (ELC) cooperative agreement is to assist state public health agencies in improving surveillance for, and response to, infectious diseases by (1) strengthening epidemiologic capacity; (2) enhancing laboratory capacity and practice; (3) improving information systems; and (4) developing and implementing prevention and control strategies. The purpose of this award is to support states through the ELC program to enhance and advance infrastructure and interoperability support for public health



laboratories to satisfy Stage 1 Meaningful Use criteria for reporting to public health agencies. While federal, state and local public health programs are working toward electronic exchange of information, support is needed to satisfy Stage 1 criteria and objectives so that public health laboratories can provide electronic submission of reportable lab results to public health agencies and to hospital laboratories. The development of an interoperable laboratory information management system that satisfies the Interim Final

Rule will enable information flows among EHRs, hospital labs and public health agencies, providing a more complete picture of the occurrence of infectious disease locally and nationally with more accurate and timely surveillance, pandemic preparedness and response, and case reporting.

Nevada's Application: The NSHD, in collaboration with Southern Nevada Health District, Nevada State Public Health Laboratory, and the Southern Nevada Public Health Laboratory will be applying for a project to do the following:

1. Develop a generic HL7 message that can be sent from the public health laboratories directly into the local/state public health agencies surveillance systems.
2. Develop a generic platform that can allow hospitals to transmit HL7 messages to the public health laboratories and to the local/state public health agencies surveillance systems.

Nevada Health Information Technology Blue Ribbon Task Force

120-Day Calendar: May 4 – August 31, 2010

May 4 Subcommittees on Finance and Infrastructure	Jun 13	Jul 23
May 5	Jun 14	Jul 24
May 6 Subcommittee on Governance	Jun 15	Jul 25
May 7 Task Force Meeting – Subcommittee Interim Reports due	Jun 16	Jul 26
May 8	Jun 17	Jul 27
May 9	Jun 18	Jul 28
May 10 HIE Grant Kickoff - Washington DC	Jun 19	Jul 29
May 11	Jun 20	Jul 30
May 12	Jun 21	Jul 31
May 13	Jun 22	Aug 1
May 14	Jun 23	Aug 2
May 15	Jun 24	Aug 3
May 16	Jun 25	Aug 4
May 17	Jun 26	Aug 5
May 18	Jun 27	Aug 6
May 19	Jun 28	Aug 7
May 20	Jun 29	Aug 8
May 21	Jun 30	Aug 9
May 22	Jul 1	Aug 10
May 23	Jul 2	Aug 11
May 24	Jun 3	Aug 12
May 25	Jul 4	Aug 13
May 26	Jul 5 4 th July Holiday	Aug 14
May 27	Jul 6	Aug 15
May 28	Jul 7	Aug 16
May 29	Jul 8	Aug 17
May 30	Jul 9	Aug 18
May 31 Mem Day Holiday	Jul 10	Aug 19
Jun 1	Jul 11	Aug 20 Task Force Meeting – Review Drafts of Strategic & Operational Plans
Jun 2	Jul 12	Aug 21
Jun 3	Jul 13	Aug 22
Jun 4	Jul 14	Aug 23 Final BDRs to Governor
Jun 5	Jul 15	Aug 24
Jun 6	Jul 16 Task Force Meeting – Final Reports from EHR and Privacy	Aug 25
Jun 7	Jul 17	Aug 26
Jun 8	Jul 18	Aug 27
Jun 9	Jul 19	Aug 28
Jun 10	Jul 20	Aug 29
Jun 11 Task Force Meeting – Final Reports from Governance, Finance & Infrastructure	Jul 21	Aug 30
Jun 12	Jul 22	Aug 31 Strategic & Operational Plans due to ONC

Meaningful Use of Health Information Technology Requires a Competent Workforce

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Meaningful Use of Health Information Technology Requires a Competent Workforce

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Overview of talk

- Why we need more health information technology (HIT)
- Why we need a competent HIT workforce
- What we know and should know about the HIT workforce
- How we can/should build the HIT workforce
- The HITECH HIT workforce development program

The biggest advocate for HIT

- “To improve the quality of our health care while lowering its cost, we will make the immediate investments necessary to ensure that within five years, all of America’s medical records are computerized ... It just won’t save billions of dollars and thousands of jobs – it will save lives.” (January 5, 2009)



Health Information Technology for Economic and Clinical Health (HITECH) Act

- Portion of the American Recovery and Reinvestment Act (ARRA) that allocates \$40 billion to the Office of the National Coordinator for Health IT (ONC) to provide incentives for “meaningful use” of HIT through
 - Adoption of electronic health records (EHRs)
 - Health information exchange (HIE)
 - Infrastructure
 - Regional extension centers – 60 across country
 - Research centers – four centers in specific areas
 - Beacon communities – 15 “beacon” demonstration projects
 - Workforce development – four programs

Why do we need more information technology (IT) in healthcare?

- Quality – not as good as it could be (McGlynn, 2003; NCQA, 2009; Schoen, 2009)
- Safety – IOM “errors report” found up to 98,000 deaths per year (Kohn, 2000)
- Cost – rising costs not sustainable; US spends more but gets less (Angrisano, 2007)
- Inaccessible information – missing information frequent in primary care (Smith, 2005)

Why do we not have more HIT? (Hersh, 2004)

Health Care Information Technology Progress and Barriers

William Hersh, MD

IN THE 3 DECADES SINCE THE TERM "MEDICAL INFORMATICS" was first used, individuals working at the intersection of information technology (IT) and medicine have developed and evaluated computer applications aiming to improve health and health care. The need to use

in this issue of JAMA, Slack demonstrates the value that patient-physician e-mail can have in improving patient care, and also catalogs the incomplete but encouraging underlying evidence.¹¹ As with many applications of IT, the technology can improve the existing situation but also empower clinicians and patients to think more fundamentally about how innovation can lead to changes in the way medicine is practiced

- Cost
- Technical challenges
- Interoperability
- Privacy and confidentiality
- Workforce

care IT.^{8,9} It is no exaggeration to declare that the years ahead portend the "decade of health information technology."¹⁰

Informatics is poised to have a major impact in patient-clinician communication. In the Clinical Crossroads article

See also p 2255.

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ment. The rest goes to those who typically do not pay for

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(Reprinted) JAMA, November 10, 2004—Vol 292, No. 18 2273

Why do we need a competent HIT workforce?

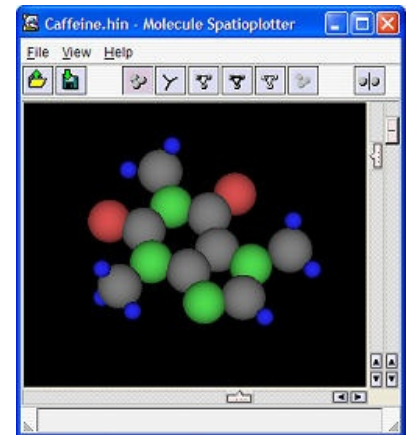
- Systematic reviews of HIT benefits show 20-25% of all studies done at four medical centers (Chaudhry, 2006; Goldzweig, 2009)
- Problematic HIT implementations well-known, with failure usually attributable to lack of understanding of clinical environment and workflow (Leviss, 2009)
- Case study: implementation of computerized physician order entry (CPOE) showed adverse consequences
 - Mortality rate increased from 2.8% to 6.6% at Children's Hospital of Pittsburgh Pediatric ICU (Han, 2005)
 - Increased mortality not seen at other academic centers (Del Baccaro, 2006; Jacobs, 2006)
 - Pittsburgh adverse outcome may have been avoided with adherence to known "best practices" (Phibbs, 2005; Sittig, 2006)

What exactly is biomedical and health informatics? (Hersh, 2009)

- Emerging discipline, based on the growing recognition of the distinction between
 - IT – generic skill sets to deploy and maintain networks, servers, devices, etc.
 - Informatics – domain-specific (in this case, biomedical- and health-related) focus on use of information to improve individual health, healthcare, biomedical research, and other areas
- Many (too many) “flavors” of informatics, all of which have core fundamental similarities
 - e.g., health, medical, clinical, biomedical, etc.

Opportunities in biomedical and health informatics are not limited to healthcare

- Bioinformatics – genomics and personalized medicine
- Clinical and translational research – building a “learning” healthcare system
- Public health – protecting the public and promoting health, e.g., H1N1 surveillance
- Consumer health – for all ages, especially aging Internet-savvy baby boomers
- Imaging informatics – use of images for biomedical research, clinical care, etc.



What do we know about the HIT workforce?

- Largest (but not only) need now in healthcare settings
- Traditional groupings of professionals in healthcare
 - Information technology (IT) – usually with computer science or information systems background
 - Health information management (HIM) – historical focus on medical records; certified as
 - Registered Health Information Administrator (RHIA)
 - Registered Health Information Technologist (RHIT)
 - Clinical Coding Specialist (CCS)
 - Clinical informatics (CI) – often from healthcare backgrounds; focus on use of clinical information
- Most research about workforce has focused on counts of professional groupings (usually IT or HIM staffing)

What do the data show?

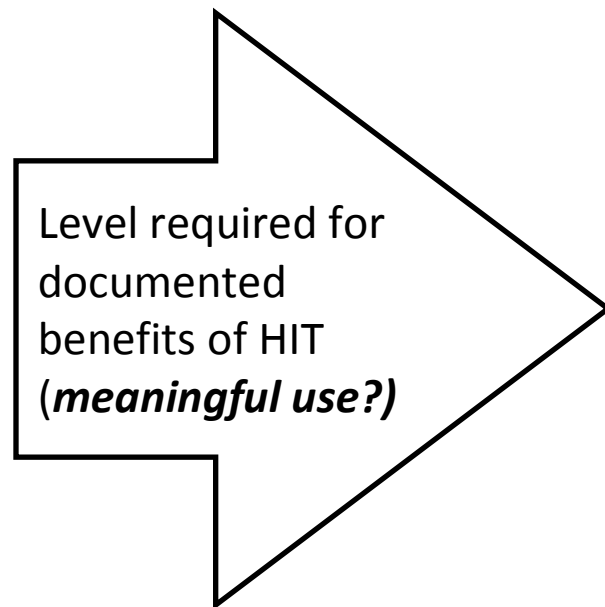
- Mostly done in hospital settings; usually focused on one (of three main) groups
 - IT – HIMSS Analytics Database™ study
 - HIM – Bureau of Labor Statistics data
 - CI – mainly estimates
- Recent work focused on needs for the ARRA EHR agenda
- Also international studies from England, Australia, and Canada, which have taken broader view, i.e., include all HIT personnel

HIMSS Analytics study

(Hersh and Wright, 2008)

- Assessed current and anticipated HIT workforce needs using HIMSS Analytics Database™ (www.himssanalytics.com), which contains
 - Self-reported data from about 5,000 US hospitals, including number of beds, total staff FTE, total IT FTE, applications, and vendors used for applications
 - EMR Adoption Model™, which scores hospitals on eight stages to creating a paperless record environment

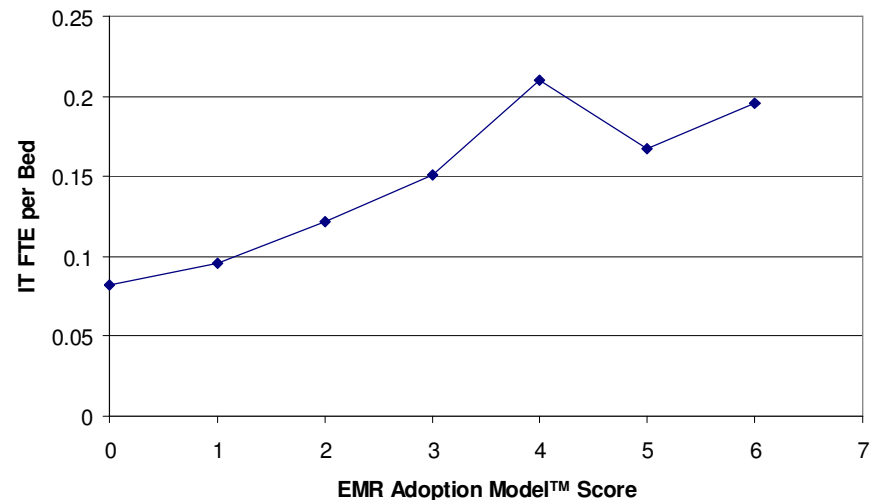
HIMSS Analytics EMR Adoption Model™



Stage 7	Medical record fully electronic; CDO able to contribute to EHR as byproduct of EMR
Stage 6	Physician documentation (structured templates), full CDSS (variance & compliance), full R-PACS
Stage 5	Closed loop medication administration
Stage 4	CPOE, CDSS (clinical protocols)
Stage 3	Clinical documentation (flow sheets), CDSS (error checking), PACS available outside Radiology
Stage 2	CDR, CMV, CDSS inference engine, may have Document Imaging
Stage 1	Ancillaries – Lab, Rad, Pharmacy – All Installed
Stage 0	All Three Ancillaries Not Installed

Results

- IT per non-IT staff ~ 1:60
- IT FTE per bed rises from stages 0 to 4
- Extrapolating to country as a whole
 - 108,390 IT staff at current adoption levels
 - Would increase to 149,174 if all stages <4 hospitals moved to stage 4
 - Sound bite: Need for >40,000 more!



Limitations of study:

- Extrapolations
- Data incomplete
- Does not include CI or HIM
- Current practices, not best practices

HIM data from US Bureau of Labor Statistics

- From US Bureau of Labor Statistics occupational employment projections 2008-2018 (BLS, 2009)
 - Medical Records and Health Information Technicians (RHITs and coders) – about 172,500 employed now, increasing to 207,600 by 2018 (20% growth)
- Also employed as managers and in a variety of other occupations (RHIAs)

Clinical informatics

- Individuals who bring skills at intersection of health care and IT (Hersh, 2008; Hersh, 2009)
 - Focus more on information than technology
 - Likely to lead “meaningful use” of HIT
- Estimates of need
 - One physician and nurse in each US hospital (~10,000) (Safran, 2005)
 - About 13,000 in health care (Friedman, 2008) and 1,000 in public health (Friedman, 2007)
 - Growing role of CMIO and other CI leaders (Leviss, 2006, Shaffer, 2009)
 - Limitation: Lack of Standard Occupational Code (SOC) – more important than we think (BLS, 2004)

Case study of two Oregon health systems (unpublished)

- Semi-structured interviews of leadership and managers
- Key qualifications for CI professionals included
 - Clinical training or exposure and an understanding of clinical workflow
 - Soft skills, including “culture fit,” service and team orientation, communication skills, patience, and adaptability to a rapidly changing environment
 - Aptitude for technology learning and appreciation of data rather than highly advanced technical skills or a computer science background
 - Six Sigma, Lean, and Change Management training
 - Baccalaureate degree as a baseline

ONC estimates 51,000 needed for HITECH agenda in 12 job roles

- Mobile Adoption Support Roles
 - Implementation support specialist*
 - Practice workflow and information management redesign specialist*
 - Clinician consultant*
 - Implementation manager*
- Permanent Staff of Health Care Delivery and Public Health Sites
 - Technical/software support staff*
 - Trainer*
 - Clinician/public health leader†
 - Health information management and exchange specialist†
 - Health information privacy and security specialist†
- Health Care and Public Health Informaticians
 - Research and development scientist†
 - Programmers and software engineer†
 - Health IT sub-specialist†

(to be trained in *community colleges and † universities) (Monegain, 2009)

HIT workforce needs are not limited to the United States

- England (Eardley, 2006)
 - Estimated 25,000 FTEs out of 1.3 million workers in English NHS
 - One IT staff per about 52 non-IT workers
 - Future people and skills shortages anticipated
- Australia (Legg, 2009)
 - Includes all HIT workforce
 - Estimated 9,000-15,000 workers (one estimate based on 1:50 ratio)
 - Anticipated shortage, to be addressed through increased supply, improved productivity, and reduced demand (through system design)
- Canada (O'Grady, 2009)
 - Seven categories (including IT, HIM, and informatics)
 - Estimated 29,000-36,000 workers with 7-26% expansion by 2014 based on different growth scenarios
 - Also estimated need for further training and experience by 27% now and 38-79% by 2014 under various growth scenarios

How do we build the workforce?

- Historically most education at graduate level
 - Informatics is inherently multidisciplinary and there is no single job description or career pathway
- More information on programs on AMIA web site
 - <http://www.amia.org/informatics-academic-training-programs>
- Commentary at
 - <http://informaticsprofessor.blogspot.com>
- Let's look at
 - Educational level
 - Competencies
 - Career pathways

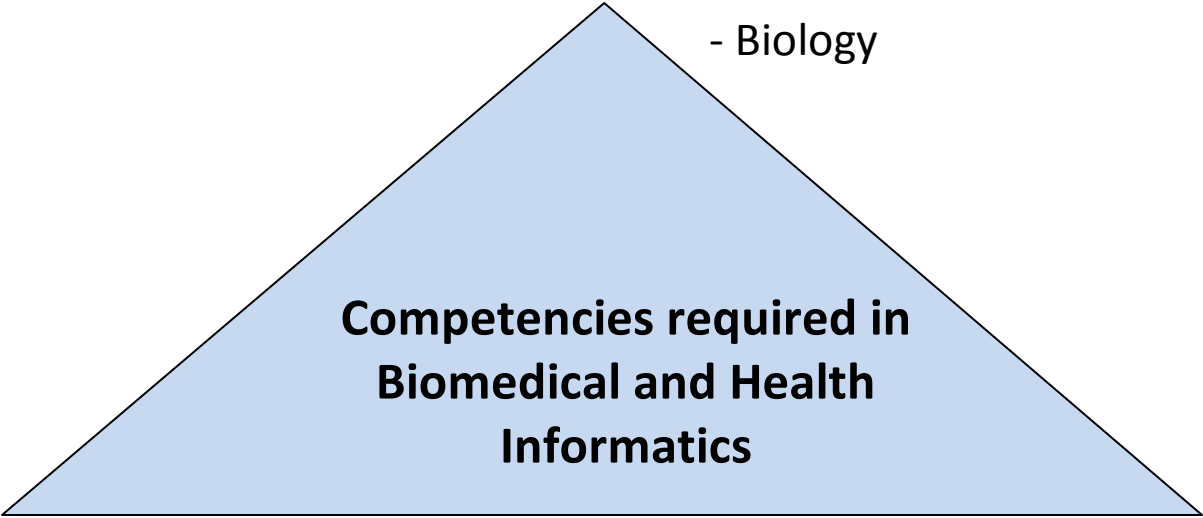
What education should informatics professionals have?

- Healthcare Informatics (Vendome, 2009) has found following distribution of degrees
 - Leadership - 18% have doctoral or professional degrees, 48% have master's degrees
 - Clinical/High Authority - 34% have doctoral or professional degrees, 29% have master's degrees, and 30% have bachelor's degrees
 - Clinical/Low Authority - 20% have doctoral or professional degrees, 31% have master's degrees, and 35% have bachelor's degrees
 - Non-Clinical/High Authority - 36% have master's degrees, and 38% have bachelor's degrees
 - Non-Clinical/Low Authority - 24% have master's degrees, and 51% have bachelor's degrees

What competencies should those professionals have? (Hersh, 2009)

Health and biological sciences:

- Medicine, nursing, etc.
- Public health
- Biology



**Competencies required in
Biomedical and Health
Informatics**

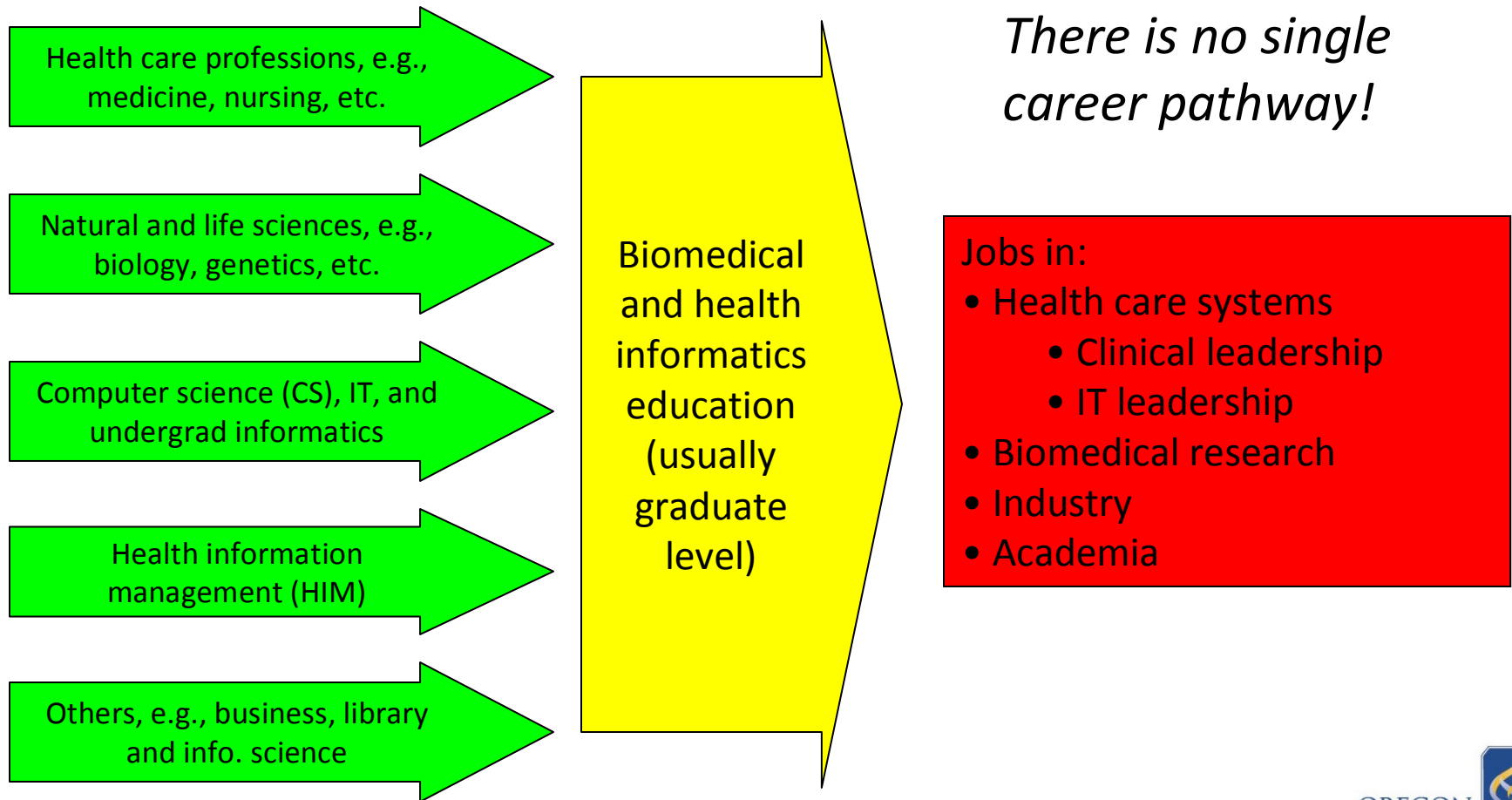
Management and social sciences:

- Business administration
- Human resources
- Organizational behavior

Computational and mathematical sciences:

- Computer science
- Information technology
- Statistics

Career pathways have diverse inputs and outputs (Hersh, 2009)



Experience of the OHSU program (<http://www.ohsu.edu/dmice/>)

- Graduate level programs at Certificate, Master's, and PhD levels
 - “Building block” approach allows courses to be carried forward to higher levels
- Two “populations” of students
 - “First-career” students more likely to be full-time, on-campus, and from variety of backgrounds
 - “Career-changing” students likely to be part-time, distance, mostly (though not exclusively) from healthcare professions
- Many of latter group prefer “a la carte” learning
 - This has led to the successful 10x10 (“ten by ten”) program that began as OHSU-AMIA partnership (Hersh, 2007; Feldman, 2008)
 - Overview and access to demo: <http://www.billhersh.info/10x10.html>

Overview of OHSU graduate programs

		<u>PhD</u> <ul style="list-style-type: none">- Knowledge Base- Advanced Research Methods- Biostatistics- Cognate- Advanced Topics- Doctoral Symposium- Mentored Teaching- Dissertation
<u>Masters</u> <ul style="list-style-type: none">- Tracks:<ul style="list-style-type: none">- Medical Informatics- Bioinformatics- Thesis or Capstone		
<u>Graduate Certificate</u> <ul style="list-style-type: none">- Tracks:<ul style="list-style-type: none">- Medical Informatics- Health Information Management		
<u>10x10</u> <ul style="list-style-type: none">- Or introductory course		

What about certification?

- Present in nursing for nearly a decade
- Board sub-certification coming for board-certified physicians (Gardner, 2009; Sarfan, 2009)
- Needed or desired for others?
 - AMIA evaluating certification of other doctoral-level professionals (healthcare doctorates, PhDs)
 - CAHIIM assessing certification for master's-level professionals

ONC workforce development program

- Community College Consortia to Educate Health Information Technology Professionals Program (\$70M)
- Curriculum Development Centers Program (\$10M)
- Competency Examination for Community College Programs (\$6M)
- Program of Assistance for University-Based Training (\$32M)

Community College Consortia to Educate HIT Professionals Program

- Five regional consortia of 70 community colleges to develop short-term programs to train 10,000 individuals per year in the six community college job roles



Community College Consortium – Region A

- Lead – Bellevue College, Seattle, WA
- Partners
 - Portland Community College (Portland, OR)
 - With sub-partners – Mt. Hood, Lane, Umpqua, and Blue Mountain
 - North Idaho College (Coeur d’Alene, ID)
 - Salt Lake Community College (Salt Lake City, UT)
 - Montana Tech (Butte, MT)
 - Pueblo Community College (Pueblo, CO)
 - Dakota State University (Madison, SD)
 - Lake Region State College (Devils Lake, ND)

Community College Consortium – Region B

- Lead – Los Rios Community College District
- Partners
 - Cosumnes River College
 - Butte College
 - College of Southern Nevada
 - Cypress College
 - East Los Angeles College
 - Fresno City College
- Partners (cont.)
 - Honolulu Community College
 - Mission College
 - Orange Coast College
 - Phoenix College
 - Pima College
 - Santa Barbara City College
 - San Diego Mesa College
 - Santa Monica College

Curriculum Development Centers Program

- Five universities to collaboratively develop (with community college partners) HIT curricula for 20 components (topics)
 - Oregon Health & Science University (OHSU)
 - Columbia University
 - Johns Hopkins University
 - Duke University
 - University of Alabama Birmingham
- One of the five centers (OHSU) additionally funded as National Training and Dissemination Center
 - Training – event for 300-400 community college faculty in August, 2010
 - Dissemination – Web site and feedback collection for curricula

Competency Examination for Community College Programs

- Northern Virginia Community College, in partnership with American Health Information Management Association (AHIMA), to develop competency examinations based on the six community college job roles for
 - Individuals trained through short-duration, non-degree health IT programs
 - Members of the workforce with relevant experience or other types of training

Program of Assistance for University-Based Training

- Funding for education of individuals in job roles requiring university-level training at nine universities with existing programs
 - Oregon Health & Science University (OHSU)
 - Columbia University
 - University of Colorado Denver College of Nursing
 - Duke University
 - George Washington University
 - Indiana University
 - Johns Hopkins University
 - University of Minnesota (consortium)
 - Texas State University (consortium)
- Emphasis on short-term certificate programs delivered via distance learning
- OHSU program to be run as “scholarship” program for existing programs
 - Graduate Certificate in Biomedical Informatics
 - Master of Biomedical Informatics

Conclusions

- Informatics is maturing as a discipline and profession
 - Field has emerging identity as one with expertise in using information to solve biomedical and health problems
- There are tremendous opportunities now and in the future
 - A competent and well-trained workforce is an essential requirement
- Stay tuned for the results of this exciting “experiment” in the years ahead!

For more information

- Bill Hersh
 - <http://www.billhersh.info>
- Informatics Professor blog
 - <http://informaticsprofessor.blogspot.com>
- OHSU Department of Medical Informatics & Clinical Epidemiology (DMICE)
 - <http://www.ohsu.edu/dmice>
 - <http://oninformatics.com>
- What is BMHI?
 - <http://www.billhersh.info/whatis>
- Office of the National Coordinator for Health IT (ONC)
 - <http://healthit.hhs.gov>
- American Medical Informatics Association (AMIA)
 - <http://www.amia.org>
- National Library of Medicine (NLM)
 - <http://www.nlm.nih.gov>

HITECH Workforce Readiness and Development

Presentation to the:
HEALTH INFORMATION TECHNOLOGY BLUE RIBBON TASK FORCE

Caroline Ford, M.P.H.
Assistant Dean-School of Medicine
Director-Center for Education & Health Services
Outreach-Center for Health Professions Research and
Policy

May 7, 2010



HIT Workforce Driven by:

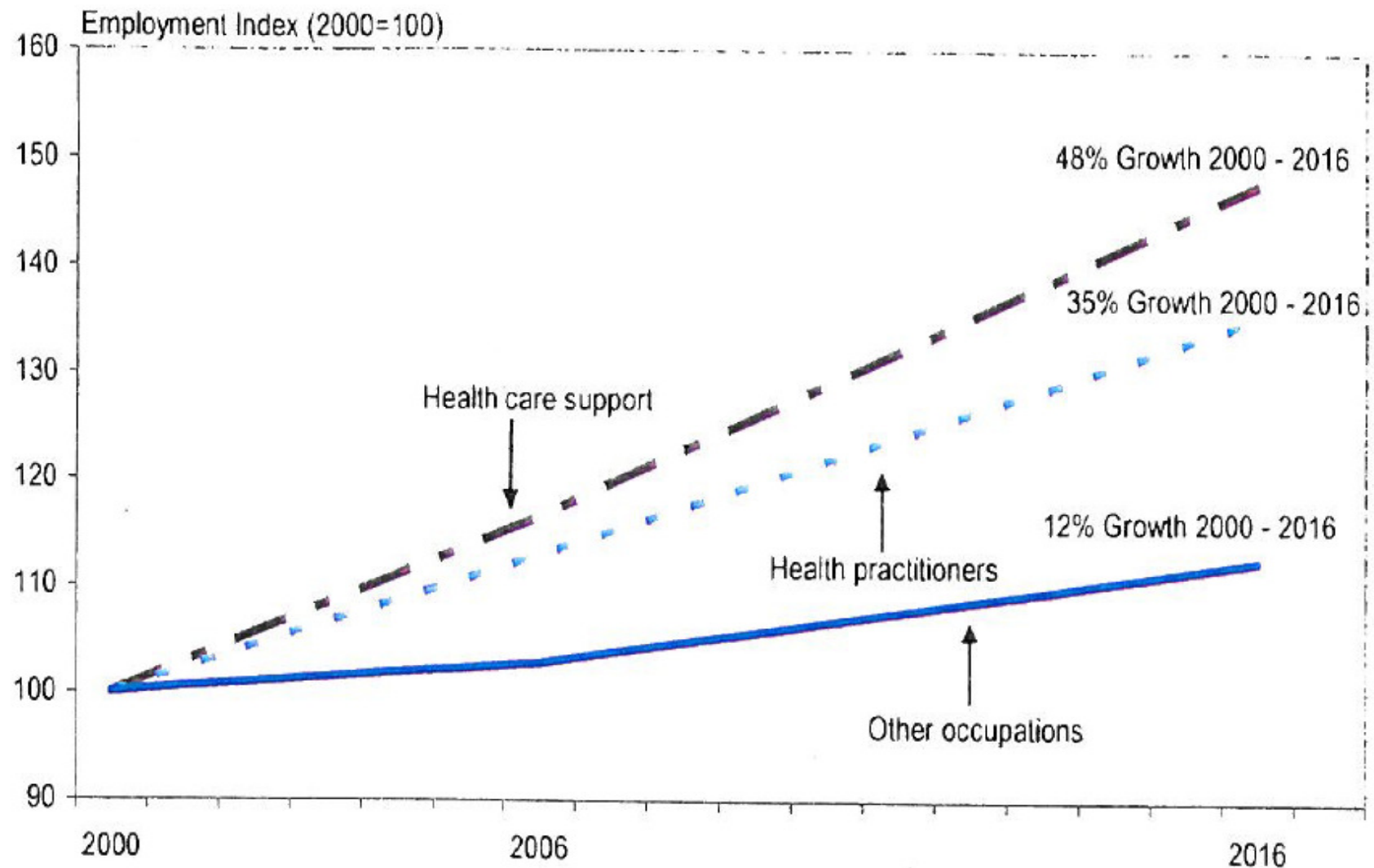
- a) HITe workforce needs/demands
- b) Certification of Professionals
- c) Federal regulation governing HIT, HIE, EMR,
CMS policy

Forecasting Sector Growth

U.S. Department of Labor's Bureau of
Labor Statistics;
Interindustry Economic Research
Foundation

Employment projection data demonstrates rapid growth and continued acceleration through 2016 in health care practitioners and technicians. Jobs for medical records and health information technicians projected to increase as investments in health information technology accelerate the growth.

Figure 3: Actual and Projected Growth of Health-Related Occupations vs All Other Occupations, 2000-2016



Sources: "Occupational Employment Projections to 2010." Bureau of Labor Statistics. *Monthly Labor Review*. November 2001. "Occupational Employment Projections to 2016." Bureau of Labor Statistics. *Monthly Labor Review*. November 2007.

Issues Compounding the Rapid Increase for HIT Professionals:

Declining numbers enrolled in computer science and information technology programs & Significant reductions of available labor force due to baby boomer retirements.

Nevada Numbers

CY 2009 Nevada Hospital Beds^{[\[1\]](#)}

Geography	Hospital beds-Acute	Hospital beds- SNFs	Other (Psy., Rehab; subst. abuse;ICF	Total	Health IT Workforce using EMR adoption score avg. of .15 FTE : 1 bed
Southern Urban	3,384	2,244	293	3,677	551
Northern Urban	1,450	694	101	2,245	337
Rural	326	423	0	510	76
Total	5,160	3,361	394	6,432	964

^{[\[1\]](#)} Nevada Hospital Association Quarterly Reports, CY 2009

CY 2009 Hospital Personnel FTEs^[1]

	Hospital FTE's				Contracted Personnel FTE's			Contract FTE	Total
Geography	RN's	LVN's & LPN's	Aids & Orderlies	Other Hospital FTE's	RN's	LVN's & LPN's	Aids & Orderlies	Other FTE's	
Southern Urban	5,785	177	1,031	8,146	142	6	29	398	15,714
Northern Urban	1,725	28	516	505	5		5		2,784
Rural	438	57	256	931	19		2	9	1,712
Total	7,948	262	1,803	9,582	166	6	36	407	20,210

^[1] Nevada Hospital Association Quarterly Reports, CY 2009

Estimated Employment in Selected Health Industry Sectors in Nevada, All Regions 2008 & 2016^[1]

Sector	2008	2016	% Change
Ambulatory Care	40,842	51,799	21
Community Care Facilities for Elderly	2,432	3,243	25
Home Health Care	3,691	4,567	19
Hospitals, General & Specialty	29,210	35,139	17
Medical & Diagnostic Labs	2,976	3,523	16
Nursing & Residential Care	9,442	11,514	18
Dental Offices	6,994	9,001	22
Physician Offices	17,325	23,371	26
Outpatient Care Centers	3,176	3,720	15
Other Ambulatory Care Services	2,087	2,572	19
Offices of other Health Practitioners	4,591	6,045	24
Health Care & Social Assistance	94,621	118,552	20
Total	217,387	273,046	Avg. % 20

^[1]Estimated Employment in Selected Health Industry Sectors in Nevada by Region – 2006 to 2016

Source: Research & Analysis Bureau, Nevada Workforce Informer. 2008b. 10 Year Employment Projections. [Data file]. Carson City,

NV: Nevada Department of Employment, Training, and Rehabilitation. Available from

<http://detr.state.nv.us/researchandanalysis.htm>.

Compiled by: Nevada State Office of Rural Health; Nevada Rural and Frontier Health Data Book, 2009. Table 4.3

HIT Workforce Projections

CY 2009 Beds	964
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.15 FTE per bed

2008 Health Professionals	4,348
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1 FTE per 50 non-IT FTE

5,312

2016 Health Professionals

Projection

5,462

Incomplete data on licensed professionals,
hospital beds, state agencies, private practice,
other

HIT Workforce Threats

Downward spiral of state budgets

Furlough of faculty

Elimination of colleges

Elimination of programs

Lack of incentives for new training

WICHE Report, A Closer Look at Healthcare Workforce Needs in the West-Health Information Technology

“New health IT tools such as EHRs will begin to diminish the need for medical coders, billers and transcriptionists. These professionals make up the largest percentage of the total U.S. health IT graduate population each yr-
..colleges/universities will have to modify existing degrees and add new degrees to meet future needs of the IT-enabled health care industry.”

Health IT Training Programs in WICHE and Non-WICHE States

The table below presents data from a preliminary analysis of health IT degree programs in the U.S. from both WICHE and non-WICHE states. Findings from the analysis show that:

- ◀ 718 health IT degree programs are available in the U.S., with 125 programs (17 percent) in WICHE states and 593 programs (83 percent) in non-WICHE states.
- ◀ Of the 8,266 health IT degrees granted, only 1,308 (16 percent) were in WICHE states, compared to 6,958 (84 percent) in non-WICHE states.
- ◀ Females make up approximately 90 percent of students enrolled in health IT programs nationwide.
- ◀ The majority of degree programs are available at the certificate (54.9 percent) or associate (31.8 percent) levels, with fewer programs available at the bachelor's (9.1 percent), master's (3.7 percent), and doctorate (.5 percent) levels.

Health IT Graduates in WICHE and Non-WICHE States: 2006 Completions Data

Degree Description:	Certificate		Associate		Bachelor's		Master's		Doctorate		Total Degrees Granted
	WICHE States	Non-WICHE States	WICHE States	Non-WICHE States	WICHE States	Non-WICHE States	WICHE States	Non-WICHE States	WICHE States	Non-WICHE States	
Bioinformatics/Medical Informatics	0	0	1	0	46	110	32	245	8	26	468
Health Information/Medical Records Administration/Administrator	254	1,237	34	173	56	537	6	16	0	0	2,313
Health Information/Medical Records Technology/Technician	556	2,491	301	2,123	0	0	8	0	6	0	5,485
Total Degrees Granted in 2006	810	3,728	336	2,296	102	647	46	261	14	26	8,266

Source: National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), 2006 Completions Survey.

Western Governor's University:
online university driven by a mission to expand
access to higher education through online,
competency-based degree programs.

Online College of Information Technology

Degrees offered include:

BS

MS

MBA

National Conference of State Legislatures: Health Information Technology and States Report - addresses state models that promote Health IT; a Massachusetts example for building professional capacity links medical school loan repayment to health IT competency.

Health Information Technology Education (HITE) Task Force

Purpose: Organized Task Force to discuss the development of educational activities in HIT in response to opportunities created through the ARRA funds (and other funding opportunities). The long-term goal is to identify a path, for the System, in the development of future educational opportunities in HIT.

Overall Goal: Develop sustainable system-wide interdisciplinary/collaborative HIT educational opportunities for Nevadans working in the health field (with the ultimate goal to improve the health and health care quality in Nevada by enhancing information systems).

Specific Aims: Develop/expand a broad set of specific educational programs that can be offered to Nevadans throughout the State.

The Health Workforce Crisis in Nevada:
A backdrop of workforce deficiencies impact
system capabilities to address health IT

Nevada's overall health professions ranking in the United States is 45th. The following represent acute shortages of medical professionals:

Ranked 50th Registered Nurses

Ranked 46th Physicians

Ranked 50th Nursing Aides/Orderlies

Ranked 45th Medical Technologists

Ranked 50th Dieticians

Ranked 46th Respiratory Therapists

Source: United Health Foundation-America's Health Rankings 2009 Report

Other health professions groups in 2009 were ranked
as:

Dentists – 38th
EMTs and Paramedics – 41st
Optometrists – 33rd
Pharmacists – 34th
Physical Therapists – 50th
Physician Assistants – 35th
Physicians, MDs – 46th
Primary care physicians – 45th
General/Family physicians-45th
Psychiatrists – 43th
General surgeons – 49th
Specialty surgeons – 50th

Source: Health Care Rankings 2009. Washington DC: CQ Press.

Recommendations

- Institute effective intra and inter-state collaboration for health informatics programming;
- Activate a closer partnership between industry and education to develop a health IT workforce that meets competency requirements;
- Execute immediate and formal collaboration with Nevada Workforce agencies and statewide education programs to address education gaps and resources;
- Structure incentives to attract new workforce to train and remain in Nevada;
- Develop linkages with on-line providers of education to expedite health IT workforce output;
- Seek planning and development funding through state/federal resources to develop educational infrastructure.



Health Information Technology NSHE's Role & The Educational State of the State

Education Program Inventory

- One accredited program to serve the needs of the state
 - CSN
 - AAS in Health Information Technology



NSHE Efforts to Increase Educational Opportunities

- In anticipation of ARRA funding under Section 3016:
 - NSHE task force formed in August 2009 to develop a web-based HIT educational program(s) that can be shared by multiple institutions within the system and across the state.
 - This task force centered on graduate, undergraduate, certificate and bridge programs for health professional and non-health professional students in the area of health information technologies.



Task Force Mission

- Develop/expand a broad set of specific educational programs that can be offered to Nevadans throughout the state.
 - Certificate of Achievement (career ladder)
 - Certificate of Completion (post Baccalaureate)
 - Associates Degree (existing)
 - Minor (Bachelors – interdisciplinary)
 - Masters (develop HIT courses for integration into existing graduate and professional NSHE institutions; facilitate sharing of existing courses)



Challenges

Limited faculty expertise and
resources in HIT education

ARRA Funding Opportunities Under Section 3016

- Community College Consortia to Education IT Professionals in Health Care
 - Total Funding: \$70M
 - Awards: Structured regional approach--up to 11 – 14 for Region B (AZ, CA, HI and NV)
- HITECH Curriculum Development Center
 - Total Funding: \$10M
 - Awards: up to 5 with one awardee to serve as the National Training and Dissemination Center



ARRA Funding Opportunities under Section 3016 (cont'd)

- Competency Examination for Individuals Completing Non-Degree Training
 - Total Funding: \$6M
 - Awards: 1 nationwide
- Information Technology Professionals in Health Care: University-Based
 - Total Funding: \$32M
 - Awards: 8-12 nationwide



Challenges

- High expectation for output (i.e., for Community College Consortia, requirement is to train 150 students per member community college)
- **Preference given to existing education and training programs**
- Funds will be non-recurrent
- Limited faculty with expertise



Successes

- CSN – Hyla Winters





Health Information

Workforce Training

lege of Southern Nevada

wide H.I.T. Workforce Training Provider

CSN is a part of the Los Rios HITECH Consortium

- 14 member colleges
- Covering 4 states including CA, AZ and HI

Curriculum is being developed by Oregon Health Science System due July 2010

Workforce training must begin by September 30, 2010

CSN must recruit and enroll 150 students per year

What has CSN been asked to do

awarded \$\$\$ to provide training in ONC defined workforce roles for most current health IT workforce needs

deliver flexible curriculum modules to graduate co-horts in 6 months or less

deliver curriculum to rural locations within the defined geographic area

interface with the HIE and other elements of the US HHS HIT national program

vada

Access to pertinent flexible training
Address existing workforce needs

Train workers to facilitate the
Adoption and use of EHR by the
Set deadline

Pay for incumbent workers to gain
Acquireable skills that contribute directly
to the business bottom line

Integration of all aspects of Health IT
Establish regional extension centers to
Facilitate information exchanges to physician
Improve infrastructure



Health I.T. Timeline

April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 | October 2010 | Spring 2011 | May 2011

1 – Operational Plan Development

2 – Curriculum

3 – Instructional Design and faculty training

4 – Instruction begins

5 – Graduate HIT cohort

1

Develop
Operational Plan

2

Curriculum
Development

3

Instructional
Design / Faculty
Training

4

H.I.T. Training
Instruction begins
September 30

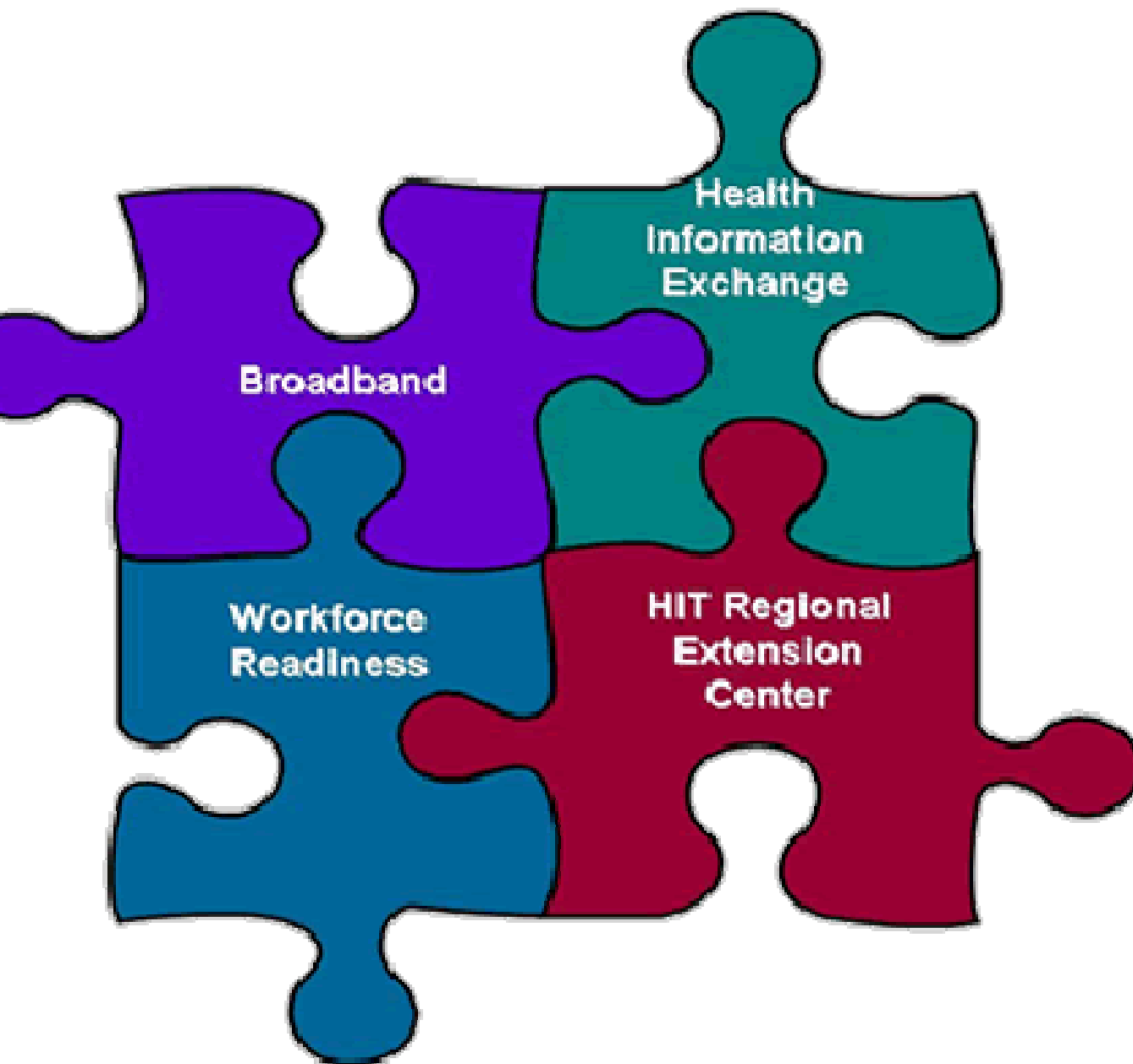
5

Graduate first Co-
hort – Spring
2011

Workforce Roles



- CSN plans to provide training for the following defined workforce roles:
- Practice workflow & information management redesign specialist
- Clinician / Physician consultant
- Implementation support specialist
- Implementation manager
- Technical / software support staff
- Trainer



Broadband

Health Information
Exchange

HIT Regional
Extension
Center